

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Norfolk Southern Bartow Derailment - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #2
Progress POLREP High-Hazard Consequence Phase
Norfolk Southern Bartow Derailment

Bartow, GA
Latitude: 32.8973490 Longitude: -82.4908240

To: James Webster, USEPA R4 ERRPB
Jerry Campbell, GAEPD

From: Richard Jardine, FOSC

Date: 1/15/2019

Reporting Period: 1/10/2019 to 1/15/2019

1. Introduction

1.1 Background

Site Number:	C476	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	PRP Oversight
Response Lead:	PRP	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	1/6/2019	Start Date:	1/6/2019
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	01/06/2019
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category - This action is the Consequence Management Phase of an Emergency Response. CERCLA Emergency Response Action

1.1.2 Site Description - Derailment - On January 6, Norfolk Southern reported the derailment of approximately 39 railcars, 19 of which were carrying hazardous materials (HAZMAT), while traveling near the City of Bartow, Georgia causing the evacuation of approximately 350 residents. Norfolk Southern railroad, the Jefferson County Emergency Management Agency, Georgia Environmental Protection Division (GAEPD) and the EPA established a Unified Command to respond to the Site.

1.1.2.1 Location - just north of the City of Bartow, GA

1.1.2.2 Description of Threat - The potential release of chlorine gas creating a poison inhalation hazard, intense fire or explosion, severe skin, and respiratory burns.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results -All 19 cars are now stabilized and staged for product transfer. The Responsible Party (RP) is developing a sampling plan to provide for removal of contaminated soil and surface water as appropriate.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative - Chemicals contained in the derailed include chlorine, hydrochloric acid, hydrogen peroxide, sodium hydroxide, and sodium bisulfite. A total of 19 hazard material cars were severely damaged during the derailment. Thirteen of the 19 cars damaged are chlorine cars. The hydrochloric acid, hydrogen peroxide, and sodium bisulfite cars were breached. At least one chlorine car suffered a fractured valve within the dome assembly. That car required the installation of a 'C' repair kit. The acid and oxidizer cars lost significant product which pooled together and created an acid vapor plume that burned approximately 27 responders and community members. Several victims required specialized care in the Doctors Hospital burn unit in Augusta.

2.1.2 Response Actions to Date - During the early stages immediately after the derailment, local responders evacuated more than 300 community members from within a 3-mile radius of the derailment site. The releases from the breached cars continued during the emergency, causing work crews to withdraw several times during their response efforts. Those efforts include -identify the condition of the cars, safely move and stage all cars, and stop the releases for those cars that were breached. Although the cars are secure and staged, they are not transportable. A high hazard risk remains during the requisite transloading of material to sound tankers. Additionally, the responsible party is taking measures to address environmental contamination.

During this reporting period, work crews

- pumped the sodium bisulfite into poly tanks.
- began a decontamination process of the chlorine cars. This process entails neutralizing (with a caustic agent) the insulation materials in the space between the tank itself and the jacket.

- product transfer of the hydrochloric acid from the damaged tanker into a lined frac tank.
- mixing of a diluted base with the 'pit' acid. The pit is an area where the pile of derailed cars landed. This is a swampy area that was severely wallowed out due to the movement of heavy equipment and loaded damaged cars.
- collected surface water samples.
- conducted air monitoring.

Additionally, upon a request by the Mayor, EPA began taking measures to make a determination whether the City of Bartow drinking water system was impacted by the incident.

During this reporting period:

- offloaded material from hydrogen peroxide railcar (estimated 7000 gallons) through water/lime bubbling neutralizer.
- completed purging of hydrogen peroxide railcar;
- move empty cars (empty tank and box cars) away from the work & staging area;
- continued air and surface water monitoring;
- circulating swamp water (from the woods) back to the dirt road stormwater conveyance, where the lime powder is introduced to lower pH;
- prepped for chlorine transfer (i.e., set frac tanks with sodium hydroxide, engineer rail spur,
- began to off-load of sodium hydroxide cars;
- begin spur line construction;
- add insulation to chlorine cars (if needed)

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs) - No enforcement actions have been taken as of this time.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
hydrochloric acid	air/water/soil	17k gallons			
chlorine	air	< 1 lb			
hydrogen peroxide	air/water/soil	15k gallons			
sodium bisulfite solution	water/soil	5 gallons			

2.2 Planning Section

2.2.1 Anticipated Activities - ship hydroxide off site, purge hydroxide cars (2 cars), move from work area.

2.2.1.1 Planned Response Activities

2.2.1.2 Next Steps - ship liquid waste products to treatment works in Greenville; ship viable commodities to manufacturers; prepare for Chlorine transload.

2.2.2 Issues

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

3.1 Unified Command - Jefferson County EMA Director Jim Anderson and GA EPD SOSC Clete Barton remain engaged from their respective offices. EPA R4 and Norfolk Southern remain on Site, rotating key personnel. For EPA, OSC Rhame intends to demobe Tuesday 15JAN19, OSC Eichinger mobilizes Wednesday 16JAN19. EPA START contractor also rotates personnel and have maintained a continuous Site presence.

3.2 Cooperating Agencies - FRA is independently conducting their investigations on site and off site. R4 RRT has convened episodically throughout the response.

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.